

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Canceled).

10. (Previously Presented): A method for producing a silicon single crystal by the Czochralski method, comprising the steps of using a silicon seed crystal wherein oxygen concentration in the seed crystal is 12ppma (JEIDA) or less, bringing a tip end of the seed crystal into contact with a silicon melt to melt the tip end of the seed crystal, performing necking operation, and growing a silicon single crystal.

11. (Previously Presented): A method for producing a silicon single crystal by the Czochralski method, comprising the steps of using a silicon seed crystal which does not have a straight body portion but has a body shape selected from the group consisting of a cone shape, a pyramid shape, a cone shape whose side face is formed with a curved surface, a combined truncated cone and pyramid shape, and a combined truncated pyramid and cone shape, bringing a tip end of the seed crystal into contact with a silicon melt to melt the tip end of the seed crystal, performing necking operation, and growing a silicon single crystal.

12. (Previously Presented): A method for producing a silicon single crystal by the Czochralski method, comprising the steps of using a silicon seed crystal wherein oxygen concentration in the seed crystal is 12ppma (JEIDA) or less, bringing a tip end of the seed crystal into contact with a silicon melt to melt the tip end of the seed crystal, and growing a silicon single crystal without performing necking operation.

13. (Previously Presented): A method for producing a silicon single crystal by the Czochralski method, comprising the steps of using a silicon seed crystal which does not have a straight body portion but has a body shape selected from the group consisting of a cone shape, a pyramid shape, a cone shape whose side face is formed with a curved surface, a combined truncated cone and pyramid shape, and a combined truncated pyramid and cone shape, bringing a tip end of the seed crystal into contact with a silicon melt to melt the tip end of the seed crystal, and growing a silicon single crystal without performing necking operation.